for equipment meets the income eligibility requirements established by the Commission.

(f) Each program certified under the NDBEDP pilot program may:
   (1) Use a portion of the funds received under the NDBEDP pilot program for individual needs assessments;
   (2) Use a portion of the funds received under the NDBEDP pilot program for installation of equipment and consumer training; and
   (3) Use a portion of the funds received under the NDBEDP pilot program for maintenance, repairs, and warranties on equipment distributed to consumers.

[g] Reporting requirements. Each program certified under the NDBEDP pilot program must submit data every six months until the completion of the pilot program on the following:
   (1) For each piece of equipment distributed, its name, serial number, brand and function, its cost, the type of service with which it is used, and the type of relay service it can access;
   (2) For each piece of equipment distributed, the identity and contact information for the consumer receiving that equipment;
   (3) For each piece of equipment distributed, the identity and contact information for the individual attesting to the disability of the individual who is deaf-blind;
   (4) The cost, time and any other resources allocated to assessing an individual’s equipment needs;
   (5) The cost, time and any other resources allocated to installing equipment and training deaf-blind participants on using equipment;
   (6) The cost, time and any other resources allocated to repair and maintenance of equipment;
   (7) The cost, time and any other resources allocated to outreach activities related to the NDBEDP; and
   (8) The cost, time and any other resources allocated to the need for upgrading the distributed equipment during the pilot program, along with the nature of such upgrades.

(h) Administration of the program. The Consumer and Governmental Affairs Bureau shall designate the NDBEDP Program Administrator.
   (1) This Commission official will work in collaboration with the TRS Fund Administrator, and be responsible for:
      (i) Identifying, verifying and contacting current State EDPs to notify them of their eligibility for program participation;
      (ii) Reviewing program applications and certifying local programs to administer the distribution of equipment in each of the States;
      (iii) Serving as the Commission point of contact and overseeing all of the certified distribution programs;
      (iv) Overseeing training programs established under this program;
      (v) Reviewing and evaluating State data for best practices; and
      (vi) Working with Commission staff to adopt permanent rules for the NDBEDP.
   (2) The Fund Administrator, as directed by the NDBEDP Program Administrator, shall have responsibility for:
      (i) Reviewing cost submissions and releasing funds for equipment purchases and authorized associated services;
      (ii) Releasing funds for a nationwide training program;
      (iii) Releasing funds for a nationwide outreach effort;
      (iv) Releasing funds for other purposes, as requested by the Commission; and
      (v) Collecting data as needed for delivery to the NDBEDP Program Administrator.
   (i) Payments to certified NDBEDP participants. Payments to certified program participants under the NDBEDP shall be made in connection with equipment that has been distributed to eligible individuals, up to a State’s funding allotment under this program.
   (j) Expiration of rules. These rules expire at the termination of the pilot program.
I. Background

A. Statement of the Problem

In final rules published under Docket HM–183, PHMSA’s predecessor agency (Research and Special Programs Administration—RSPA) amended the Hazardous Materials Regulations (HMR; 49 CFR Parts 171–180) to prohibit the transportation of Division 5.1 (oxidizing), 5.2 (organic peroxides), 6.1 (toxic), and Class 8 (corrosive to skin only) hazardous materials in external product piping of a DOT specification cargo tank motor vehicle (CTMV), unless the vehicle is equipped with bottom damage protection devices. See 49 CFR 173.33(e), adopted at 54 FR 24982, 25005 (June 12, 1989), and 55 FR 37028, 37049 (Sept. 7, 1990). The external product piping refers to loading or unloading lines located on the bottom portion of cargo tanks that are exposed to vehicle collision. The term “wetlines” is commonly used in reference to external product piping when it contains, product, specifically, hazardous material (see §171.8 of the HMR transported as cargo and is used throughout this notice of proposed rulemaking (NPRM) to describe the practice of transporting hazardous material in external product piping. As explained in the June 12, 1989 final rule, the prohibition against wetlines was not applied to flammable liquids, such as gasoline, because “[a]ll motor fuels must be metered for tax purposes” and no method existed “to drain product from the cargo tank piping back into the loading facility and maintain proper accounting for tax purposes.” 1 54 FR 24937. Metering of motor fuels for tax purposes continues to date and a method to drain these fuels from cargo tank loading lines while still maintaining proper accounting has yet to be developed due to the cost considerations of installation of a process at loading racks capable of returning the product remaining in cargo tank loading lines to the loading facility or receiving the product as waste. In the September 7, 1990 final rule, we reiterated that the prohibition of wetlines was applicable only to DOT specification cargo tanks used to transport liquid hazardous materials and clarified that the prohibition in §173.33(e) does not apply to liquid hazardous materials authorized for transportation in non-specification CTMVs. We also stated that “we strongly encourage the petroleum industry to consider the risk it accepts in operating cargo tank motor vehicles over the highway with hazardous materials retained in the piping and that the hazardous materials industry consider and recommend possible alternatives to eliminate this risk in the most cost-effective manner.” 2 55 FR 37030.

Thus, it remains that there is a segment of the CTMV population that transports flammable liquid material that is not subject to prohibition of wetlines unless the vehicle is equipped with bottom damage protection devices. We believe this continues to be an important safety concern. These CTMVs continue to be involved in motor vehicle accidents resulting loss of life attributable to wetlines (see Section II Incident Analysis). Although no catastrophic incident has occurred in the recent past, PHMSA and the National Transportation Safety Board (NTSB) contend that incidents similar to the Yonkers, NY incident described in NTSB Recommendation (H–98–27; discussed in detail below) is likely to occur in the future. We base our concerns on the population of CTMVs involved in flammable liquid service, the daily volume of traffic on our Nation’s roadways, and the possibility the average motor vehicle occupancy will increase as gasoline prices increase. 3 Outside of existing conspicuity and outreach initiatives, there is little that PHMSA can do to prevent a collision between a motor vehicle and the wetlines of a CTMV. However, PHMSA can implement additional measures to ensure that DOT specification CTMVs are utilized and designed in a manner that fully considers the likelihood and potential consequences of a wetlines incident and the hazards that such an incident poses to the vehicle driver and traveling public.

B. National Transportation Safety Board Recommendation

The National Transportation Safety Board (NTSB) is an independent Federal accident investigation agency. Since its creation in 1967, the NTSB has been determining the probable cause of transportation accidents and formulating safety recommendations to improve transportation safety. On May 18, 1998, the NTSB issued safety recommendation H–98–27 recommending that DOT:

Prohibit the carrying of hazardous materials in external piping of cargo tanks, such as loading lines, that may be vulnerable to failure in an accident.

This recommendation resulted from an NTSB investigation of an accident occurring on October 9, 1997, in Yonkers, New York, that involved a passenger vehicle and a CTMV containing 8,800 gallons of gasoline. In its investigation report, the NTSB stated that the immediate result of the accident was a fire inside and below the car and that the fuel for the initial fire was the gasoline released from the cargo tank’s loading lines (i.e., the wetlines) during impact. The fire was then fed by gasoline from the cargo tank’s compartments. The NTSB concluded that, had the loading lines been empty, the fire likely would not have occurred. Based on its investigation, the NTSB identified the operation of a CTMV with unprotected loading lines carrying hazardous materials as a serious safety issue. NTSB recommendations are included among the actions that drive PHMSA to initiate rulemakings. The NTSB Recommendation (H–98–27) and the accident report (NTSB Report Number HAR98–02) can be reviewed at http://www.ntsb.gov/.

NTSB continues to recommend the prohibition of what it considers the unsafe practice of transporting flammable liquids in wetlines. In recent correspondence with PHMSA, the NTSB expressed disappointment in our efforts to address the intent of their recommendation including the withdrawal of our December 30, 2004 NPRM (HM–213B; 69 FR 78375) and restated their concern by highlighting the results of an accident report (NTSB Report NumberHZB–09–01) regarding a motor vehicle accident involving a CTMV transporting gasoline and a passenger vehicle that occurred July 1, 2009. The NTSB determined that the vehicle struck a wetline causing the release of 13 gallons which resulted in a fire that caused the death of the driver of the passenger vehicle. The NTSB noted that this accident illustrates why it believes PHMSA should prohibit the practice of transporting flammable liquids in wetlines. The NTSB concluded in its correspondence that based on the age of the recommendation, the lack of measurable progress by PHMSA to satisfy the intent of the recommendation, and that this unresolved issue contributed to the severity of another accident, their recommendation was downgraded from “Open-Acceptable Response” to “Open-Unacceptable Response.” The NTSB indicated that it would be willing to reconsider its position on the recommendation pending the publication of a rulemaking that prohibits the transportation of flammable liquids in wetlines.

C. Docket No. HM–213B

On February 10, 2003, PHMSA published an advance notice of proposed rulemaking (ANPRM; 68 FR 6689) to solicit comments and information regarding methods to reduce the safety hazard associated with the retention of lading in unprotected wetlines. We asked commenters to address a number of issues to assist in making a determination as to whether regulatory changes could be affected, including the state of technological development, practical alternatives to protect the wetlines or eliminate the safety problem, the effectiveness of measures such as increased conspicuity or side guards, and industry practices to minimize the safety problem.

Based on comments received in response to the February 10, 2003, ANPRM and PHMSA assessment of the safety issues, on December 30, 2004, the agency published a notice of proposed rulemaking (NPRM; 69 FR 78375) proposing to amend the HMR to prohibit the carriage of flammable liquids in wetlines on a DOT specification cargo tank, unless the CTMV was equipped with bottom damage protection devices. PHMSA proposed a quantity limit of one liter or less in each pipe, but did not propose a specific method for achieving this standard. The NPRM included an exception from the proposed requirements for truck-mounted (e.g., straight truck) DOT specification CTMVs. PHMSA proposed to require compliance with the proposed changes two years after the effective date of a final rule to provide time for planning, developing, and testing damage protection systems or systems designed to remove hazardous materials from product piping, or for redesigning CTMVs to eliminate external product piping altogether; and proposed to permit CTMV operators five years to phase in requirements applicable to existing CTMVs to minimize the costs of down time for installation of equipment or redesigns by providing an opportunity to retrofit an existing CTMV during the scheduled requalification time because each specification CTMV must undergo periodic hydrostatic pressure testing every five years.

Based on comments received in response to the notices, the agency reevaluated data and information concerning potential costs and benefits of regulatory alternatives to ensure that a final rule prohibiting the transportation of flammable liquids in unprotected wetlines would be cost-effective. After extensive analysis, PHMSA concluded that the quantifiable benefits accruing from such a prohibition would not justify corresponding costs. Accordingly, PHMSA withdrew the NPRM on June 7, 2006 (71 FR 32909).

In the withdrawal notice, we noted and commended the voluntary efforts taken by the flammable liquid industry to limit the safety hazard associated with the transportation of flammable liquids in unprotected wetlines. We indicated that one large gasoline distributor has installed purging systems on its CTMVs. In addition, another large gasoline distributor has installed damage protection equipment on its CTMVs which could help to mitigate the consequences of a collision with a motor vehicle.

### II. Incident Analysis

In 2009, PHMSA reviewed approximately 6,800 incidents involving CTMVs transporting flammable or combustible liquids that occurred during the 10-year period from 1999–2009. PHMSA identified 172 incidents during this period in which wetlines were determined to be damaged and/or ruptured. A total of 18 of these incidents involved fires. Of these, eight incidents resulted in a fatality or injury. More specifically, four incidents resulted in five fatalities and four incidents resulted in four injuries directly attributable to a wetline release—that is, the fatalities and injuries resulted from a fire rather than blunt force trauma or some other event that would have occurred whether or not the wetline was damaged. Incident reports submitted to PHMSA can be reviewed at PHMSA’s Hazmat Safety Community Web site at: http://phmsa.dot.gov/hazmat/incident-report.

PHMSA continues to be concerned about the potential for serious consequences resulting from an incident involving the collision of a passenger vehicle and the wetlines on a CTMV transporting a flammable liquid such as gasoline. Because the external piping used to load and unload cargo tanks in flammable liquid fuel service is located on the underside (i.e., the belly) of a cargo tank, without protection, the piping remains exposed to a collision. The Yonkers incident investigated by the NTSB is a primary example of such an incident. As noted above, the incident involved a CTMV loaded with 8,800 gallons of gasoline. The CTMV was traveling under an overpass of the New York State Thruway (Thruway).

### Table 1—Summary of HM–213B Rulemaking Actions

<table>
<thead>
<tr>
<th>Rulemaking action</th>
<th>Publication date</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Notice of Proposed Rule-</td>
<td>February 10, 2003</td>
<td>Solicit comments and information regarding methods to reduce the safety</td>
</tr>
<tr>
<td>making.</td>
<td></td>
<td>risks associated with the retention of flammable liquids in unprotected</td>
</tr>
<tr>
<td>Notice of Proposed Rulemaking</td>
<td>December 30, 2004</td>
<td>Propose amendments to prohibit the carriage of flammable liquids in</td>
</tr>
<tr>
<td>Notice of Withdrawal</td>
<td>June 7, 2006</td>
<td>Withdraw rulemaking proposal after agency review of comments received and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>cost-benefit analysis.</td>
</tr>
</tbody>
</table>
when it was struck by a passenger vehicle. The vehicle hit the right side of the cargo tank in the area of the cargo tank housing the tank’s wetlines, damaging the wetlines and releasing the gasoline they contained. The ensuing fire destroyed both vehicles and the overpass of the Thruway; the Thruway remained closed for approximately six months. The driver of the passenger vehicle was killed; the driver of the truck was not injured. The damage was estimated at $7 million. As serious as this incident was, under different circumstances the consequences could have been even more severe—if the incident had occurred during rush hour, for example, or if there had been more than one occupant of the passenger vehicle. We believe the risks associated with the carriage of flammable liquids in wetlines, particularly the potential for multiple fatalities and injuries resulting from the collision of a passenger vehicle with the wetlines on a CTMV, warrant renewed rulemaking action.

III. Regulatory Evaluation

This NPRM is based on and supported by cost-benefit conclusions presented in the regulatory evaluation. The evaluation is available for review in the docket to this rulemaking. The evaluation of costs and benefits for this proposed rulemaking relies on a number of different assumptions that are independent—i.e., any change in unit cost assumptions will not affect the calculation of benefits, and vice versa. In addition, our cost estimates are based on a complete set of direct and indirect costs, most based on consensus estimates with stakeholders. In contrast, our benefit calculations are based on incidents occurring over the past ten years and the estimated consequences of a catastrophic event spread out over 20 years. As a result of our decision to spread the catastrophic event benefits over 20 years, PHMSA considers the values for estimated benefits to be conservative as evidenced through sensitivity analysis (see Section V Executive Order 12866 and DOT Regulatory Policies and Procedures). We invite comment on our selection and determination of assumptions and calculations presented in the regulatory evaluation.

IV. Proposals in this NPRM

In this NPRM, PHMSA is proposing to prohibit the transportation of flammable liquids in exposed external product piping unless the CTMV is equipped with bottom damage protection that conforms to the requirements of § 178.337–10 or § 178.345–8(b)(1), as appropriate.

Since external product piping configurations on CTMVs transporting gasoline or other flammable liquids may possibly contain minimal amounts of product even by design or when drained or purged, we are proposing to allow a residue quantity of no more than one liter (0.26 gallon or 33 ounces) to remain in each pipe. This allowance is a performance standard based on vehicle design. We assume that there much less of a hazard associated with this residual amount of flammable material and invite comment on this threshold quantity.

Operators of CTMVs achieving this performance standard would not be subject to the bottom damage protection requirements. We believe that compliance with this standard could be monitored by field operations personnel observing loading practices at a terminal or by reviewing site gauges on piping when a CTMV is in transportation. We assume that there will be no additional enforcement costs associated with this monitoring and seek comment on the appropriateness of this assumption as well as the plausibility of enforcing this performance standard.

We are not proposing a specific method for achieving this residue standard but rather permitting latitude in developing measures to achieve compliance with either the damage protection requirements or prohibition of flammable liquid in wetlines to the one liter residue level. For example, an operator may elect to design external loading lines such that the quantity that remains is less than one liter per pipe. However, an operator may choose not to achieve this performance standard and continue the practice of wetlines by installing bottom damage protection on each CTMV. We invite comment on methods that can be used to achieve this performance standard and the costs associated with those methods.

Combustible Liquids. As proposed in this NPRM, the wetlines prohibition would not apply to a material classed as a combustible liquid or to a Class 3 flammable liquid material reclassified as a combustible liquid (see § 172.120(b) of the HMR). Because of their higher flashpoints, combustible liquids pose a lesser hazard than flammable liquids and are afforded a number of exceptions throughout the HMR. Moreover, our review of wetlines incidents occurring over the ten-year review of incidents included incidents involving transport of both combustible liquids and flammable liquids that would have been reclassified as combustible liquids. None of the wetlines incidents involving this class of materials resulted in a fatality or an injury. We invite comments concerning whether combustible liquids should be subject to the wetlines prohibition.

Truck-Mounted DOT Specification Cargo Tank Motor Vehicles. In this NPRM, PHMSA is proposing to except truck-mounted DOT Specification CTMVs (i.e., straight trucks) from the prohibition of wetlines containing flammable liquids. Straight trucks are designed and constructed with engine, body, and cargo tank permanently mounted to the same chassis. Based on the protective features afforded by their chassis and running gear, straight trucks present less of a hazard than most trailer and semi-trailer CTMVs because the external product piping is not exposed to impact from a vehicle collision in the same manner. Under this proposal, components of the CTMV framework such as chassis rails and cross-members, suspension components, structural mounting members, or any other device that substantially protects wetlines from the impact forces of another motor vehicle are expected to provide adequate bottom damage protection. We invite comment on whether this exception for straight trucks provides an acceptable level of safety, whether prohibiting flammable liquids in wetlines on straight trucks should be considered, or if a quantifiable design or performance standard should be developed for these types of CTMVs. In addition, we invite comment on whether a Design Certifying Engineer (DCE) would be required for determination whether straight trucks are adequately protected as part of the design certification process that is required for all DOT specification CTMVs. We invite comment on the cost of implementing a requirement for such a certification process.

Transition Period and Compliance. In this NPRM, PHMSA is proposing that the changes become effective two years after publication of the final rule. The two-year transition period provides time for planning, developing, and testing damage protection systems or systems designed to remove hazardous materials from product piping, or for redesigning CTMVs. Following this two-year deferral period, each newly manufactured DOT Specification CTMV designed with external product piping would be subject to the requirements and each existing CTMV would be required to comply with the prohibition within ten years. Acknowledging that existing CTMVs would most likely have to be placed out of service to implement a measure to comply with the
requirements, we are instituting a ten-year compliance period to accommodate this burden in hopes that this would allow sufficient time to schedule CTMVs to be out of service. We would expect that work on retrofits for existing CTMVs could be conducted at the same time as the periodic hydrostatic pressure tests that occur during the compliance period. The two-year transition period and ten-year compliance period are needed to balance the economic and operational impacts on CTMV operators and the safety enhancements from implementation of this requirement. We invite comment on the proposed two-year transition period as well as the extended ten-year compliance period for existing CTMVs. We also invite comment regarding the material, engineering, and labor costs associated retrofitting a cargo tank to comply with the proposed requirements.

Conforming amendment. For consistency in the application of the exception from the prohibition of wetlines for residue amounts of hazardous materials as adopted at 54 FR 24982, 25005 (June 12, 1989) and 55 FR 37028, 37049 (Sept. 7, 1990), PHMSA is proposing to revise the current exception in § 173.33(e) for hazardous materials other than flammable liquids to also specify an allowance for a residue quantity of one liter to remain in each line.

### Table 2—Summary of Proposed Amendments

<table>
<thead>
<tr>
<th>Proposed requirement:</th>
<th>Prohibit carriage of flammable liquid in wetlines of a DOT specification cargo tank unless the CTMV is equipped with bottom damage protection devices.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance date:</td>
<td>Two years from date of publication of final rule.</td>
</tr>
<tr>
<td>Exceptions to the proposed requirement:</td>
<td>Existing CTMVs have an additional ten years to come into compliance. Truck-mounted CTMVs (i.e., straight trucks).</td>
</tr>
<tr>
<td>CTMVs containing combustible liquids including reclassed combustibles.</td>
<td>CTMVs with wetlines designed, drained or purged so that the quantity of flammable liquid remaining does not exceed 1 L.</td>
</tr>
</tbody>
</table>

### V. Regulatory Analyses and Notices

**A. Statutory Authority for This Rulemaking**

This rulemaking is issued under the authority of the Federal hazardous materials transportation law (49 U.S.C. 5101 et seq.), 49 U.S.C. 5103(b) authorizes the Secretary of Transportation to prescribe regulations for the safe transportation, including security, of hazardous materials in intrastate, interstate, and foreign commerce.

**B. Executive Order 12866 and DOT Regulatory Policies and Procedures**

This proposed rule is a significant regulatory action under section 3(f) of Executive Order 12866 and, therefore, was reviewed by the Office of Management and Budget. The proposed rule is also a significant rule under the Regulatory Policies and Procedures of the Department of Transportation (44 FR 11034). A regulatory evaluation is available for review in the docket.

To evaluate the benefits and costs of the proposal to prohibit the carriage of flammable liquids in wetlines, we identified several technologies that would permit operators to reduce the risk from wetlines containing flammable liquids involved in a motor vehicle accident. The technologies included engineering redesigns such as shorter loading lines or relocating of loading lines such that the CTMV chassis provides protection from damage, or other alternatives such as installation of a fire suppression system. The technology selected for this final analysis is a manual purging system that can be installed without welding. This system is the lowest-cost system currently available that will allow for compliance with the performance standard of the proposed requirement. We invite comment to provide information on alternative technologies as well as the cost and benefits of such technologies to comply with the proposed requirement. A purging system evacuates the wetlines by forcing the liquid material out of the wetlines and into the cargo tank body. After loading of a cargo tank is completed and the main cargo compartment valves are closed, the system introduces compressed air from an auxiliary tank through an air filter and regulator into the lines. The purge can be completed after the CTMV leaves the loading racks and will not create additional standing time for the vehicle.

The regulatory evaluation assumes a total of 27,000 CTMVs would be affected by a rule, and the cost to install a manual, non-welded purging system would be $2,585 per CTMV (the cost numbers are based on information provided by equipment vendors). We also assumed the average service life for a CTMV in flammable liquid service is 20 years; thus, we assume on average five percent of the fleet would be retired each year. We invite comment on our assumption of the population of CTMVs in flammable liquid service that would be affected by this rulemaking as well as the assumed service life.

Benefits include avoided injuries and property damage attributable to wetlines incidents and avoided traffic delays, evacuations, emergency response, and environmental damage. For the ten-year period from January 1, 1999 through December 31, 2008, based on a review of incident narratives provided within each incident report including any follow-up communication with persons submitting the report for further clarification of the narrative, we identified 172 incidents in which wetlines were damaged and/or ruptured and a release occurred. A total of 18 of these incidents involved fires. These incidents resulted in five fatalities, four injuries, and millions of dollars in property damage.

We considered five alternatives. For purposes of this proposed rulemaking, newly constructed is defined as any new construction of a CTMV after the 2-year transition period following the effective date of the rulemaking:

1. Do nothing:
2. Prohibit the carriage of flammable liquids in wetlines on newly constructed and existing CTMVs. Existing CTMVs must be compliant in five years.
3. Prohibit the carriage of flammable liquids in wetlines on newly constructed and existing CTMVs. Existing CTMVs must be compliant in ten years.
4. Prohibit the carriage of flammable liquids in wetlines on newly constructed and existing CTMVs. Existing CTMVs must be compliant in fifteen years.
(5) Prohibit the carriage of flammable liquids in wetlines on newly constructed and existing CTMVs. Existing CTMVs must be compliant in twenty years. Given the estimated 20-year service life of CTMVs, this alternative implies that only newly constructed cargo tanks would be subject to the prohibition.

The present value benefits and costs for the compliance alternatives are provided below at 3% and 7% discount rates. A benefit-cost ratio of greater than 1.0 indicates a cost beneficial rulemaking. At the 3% discount rate, the ratios are just under 1.0 for all four alternatives.

**TABLE 3—PRESENT VALUE BENEFITS AND COSTS OF RULE**

<table>
<thead>
<tr>
<th>Alternative</th>
<th>P.V. Total benefits (3%)</th>
<th>P.V. Total costs (3%)</th>
<th>Benefit-cost ratio (3%)</th>
<th>P.V. Total benefits (7%)</th>
<th>P.V. Total costs (7%)</th>
<th>Benefit-cost ratio (7%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Compliance within 20</td>
<td>$51,644,863</td>
<td>$52,484,501</td>
<td>0.98</td>
<td>$29,759,689</td>
<td>$34,334,871</td>
<td>0.87</td>
</tr>
<tr>
<td>Years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Compliance within 15</td>
<td>64,658,075</td>
<td>66,467,692</td>
<td>0.97</td>
<td>37,762,060</td>
<td>44,138,243</td>
<td>0.86</td>
</tr>
<tr>
<td>Years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Compliance within 10</td>
<td>78,965,221</td>
<td>82,419,898</td>
<td>0.96</td>
<td>47,589,156</td>
<td>56,967,584</td>
<td>0.84</td>
</tr>
<tr>
<td>Years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Compliance within 5</td>
<td>94,714,950</td>
<td>100,635,691</td>
<td>0.94</td>
<td>59,741,517</td>
<td>73,886,787</td>
<td>0.81</td>
</tr>
<tr>
<td>Years</td>
<td></td>
<td></td>
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</tbody>
</table>

In addition to identifying the benefits and costs, we also developed corresponding sensitivity values to see how sensitive the analysis to changes in data used to calculate the ratios. The series of sensitivity analyses developed provide ranges of benefits and costs for each alternative. As previously indicated, in our base case, the benefit-cost ratios are marginally less than 1.0. However, adjustment of data points for the sensitivity analyses dramatically shifts the averages above 1.0 in all cases, reflecting the relative confidence between benefits and costs. For example, keeping costs the same as the baseline and increasing the number of fatalities per incident to 3 compared to the baseline of 1.6, and raising other (non-casualty) reported damages and associated damages by 10% increases the benefit-cost ratio to 1.6. For a complete discussion of the sensitivity analysis, please review the regulatory evaluation available in the docket to this rulemaking.

A summary of the sensitivity analysis is provided below in Table 4. High and low values are identified at both 3% and 7% discount rates.

**TABLE 4—SENSITIVITY VALUES OF BENEFIT AND COST FACTORS**

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Cost</th>
<th>BCR</th>
<th>Net benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>LOW</td>
<td>HIGH</td>
</tr>
<tr>
<td>3%</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 Yrs</td>
<td>$51,644,863</td>
<td>$76,148,563</td>
<td>$44,489,385</td>
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<tr>
<td>15 Yrs</td>
<td>64,658,075</td>
<td>95,336,093</td>
<td>56,389,062</td>
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<td>10 Yrs</td>
<td>78,965,221</td>
<td>116,431,484</td>
<td>69,997,980</td>
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<tr>
<td>5 Yrs</td>
<td>94,714,950</td>
<td>139,653,913</td>
<td>85,574,656</td>
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<tr>
<td>7%</td>
<td></td>
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<td>TOTAL:</td>
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<td>20 Yrs</td>
<td>$29,759,689</td>
<td>43,879,631</td>
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<td>15 Yrs</td>
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<tr>
<td>10 Yrs</td>
<td>47,589,156</td>
<td>70,168,593</td>
<td>48,818,082</td>
</tr>
<tr>
<td>5 Yrs</td>
<td>59,741,517</td>
<td>88,086,798</td>
<td>59,741,517</td>
</tr>
</tbody>
</table>

We selected alternative 3 for which the benefit-cost ratio is 0.96 (discounted at 3%). Our analysis is based on estimates in evaluating benefits and costs. Both costs and benefits rely on different assumptions that are independent—i.e., any change in unit cost assumptions will not affect the calculation of benefits, and vice versa. Our cost estimates are based on a complete set of direct and indirect costs. In contrast, our benefit calculations are based on incidents occurring over the past ten years and the estimated consequences of a far less-likely catastrophic event spread out over 20 years. Although serious wetlines incidents occurred before and after the study period, PHMSA believes that this ten-year period is more representative of events likely to occur over the next ten years. To account for the uncertainty in the analysis, we conducted a series of sensitivity analyses. This resulted in ranges of costs and benefits for each alternative we evaluated. For this proposal, the benefit-cost ratios range from 0.87 to 1.66 (discounted at 3%) for the 10-year compliance period for existing CTMVs. Because of the uncertainties inherent in calculating the overall benefits that would accrue and the potential for a wetlines incident to result in catastrophic consequences, we are confident that the costs associated with the proposed requirement will be more than offset by resulting benefits not quantified in this analysis, such as long-term environmental remediation and litigation costs avoided.

_C. Executive Order 13132_

This NPRM has been analyzed in accordance with the principles and criteria contained in Executive Order 13132 (“Federalism”), and the President’s memorandum on “Preemption” is published in the _Federal Register_ on May 22, 2009 (74 FR 24693). This NPRM would preempt State, local and Indian tribe requirements, but does not propose any regulation that has direct effects on the States, the relationship between the...
national government and the States, or the distribution of power and responsibilities among the various levels of government. Therefore, the consultation and funding requirements of Executive Order 13132 do not apply. We invite State and local governments and Indian tribes to comment on the effect that adoption of proposed requirements may have on safety or environmental protection programs which we have not considered.

The Federal hazardous material transportation law, 49 U.S.C. 5101–5128, contains an express preemption provision (49 U.S.C. 5125(b)) that preempts State, local, and Indian tribe requirements on certain subjects. These subjects are:

1. The designation, description, and classification of hazardous material;
2. The packing, repacking, handling, labeling, marking, and placarding of hazardous material;
3. The preparation, execution, and use of shipping documents related to hazardous material and requirements related to the number, contents, and placement of those documents;
4. The written notification, recording, and reporting of the unintentional release in transportation of hazardous material; or
5. The design, manufacturing, fabricating, marking, maintenance, reconditioning, repairing, or testing of a packaging or container represented, marked, certified, or sold as qualified for use in transporting hazardous material.

This NPRM addresses covered subject No. 5 and would preempt any State, local, or Indian tribe requirements not meeting the “substantively the same” standard. Federal hazardous materials transportation law provides at 49 U.S.C. 5125(b)(2) that, if the Secretary of Transportation issues a regulation concerning any of the covered subjects, the Secretary must determine and publish in the Federal Register the effective date of Federal preemption. The effective date may not be earlier than the 90th day following the date of issuance of the final rule and not later than two years after the date of issuance. We propose that the effective date of Federal preemption will be 90 days after the date of publication of a final rule in the Federal Register.

D. Executive Order 13175

This proposed rule has been analyzed in accordance with the principles and criteria contained in Executive Order 13175 (“Consultation and Coordination with Indian Tribal Governments”). Because this NPRM does not have tribal implications, does not impose substantial direct compliance costs, and is not required by statute, the funding and consultation requirements of Executive Order 13175 do not apply.

E. Regulatory Flexibility Act, Executive Order 13272, and DOT Procedures and Policies

The Regulatory Flexibility Act (5 U.S.C. 601 et seq.) requires Federal agencies to consider the effects of the regulatory action on small business and other small entities and to minimize any significant economic impact. The term “small entities” comprises small businesses and not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000. Accordingly, DOT policy requires an analysis of the impact of all regulations on small entities, and mandates that agencies strive to lessen any adverse effects on these businesses.

PHMSA is proposing this regulatory action because flammable liquids transported in wetlines continue to be involved in motor vehicle accidents and contribute to the fatality, injury, and damage to persons and property involved in an accident. The objective of this proposed rulemaking is to prohibit the transport of flammable liquids in wetlines unless protected against damage by bottom damage protection devices. This regulatory action is being proposed under the authority of the Federal hazardous materials transportation law (49 U.S.C. 5101 et seq.). 49 U.S.C. 5103(b) authorizes the Secretary of Transportation to prescribe regulations for the safe transportation of hazardous materials in commerce. PHMSA does not have definitive data on the number of small entities to which this proposed regulatory action would apply but a cursory review of industries and registrants within the industries that self-identify as small business indicates a significant number of small entities.

This regulatory action imposes no new reporting or recordkeeping requirement on small entities nor are we aware of any Federal program that would duplicate or conflict with this regulatory action.

PHMSA completed a regulatory flexibility analysis of the impact of this proposed rulemaking on small entities. We concluded that the NPRM has the potential to create significant economic impacts on a substantial number of small entities. However, due to patterns of CTMV ownership in affected industries, we believe many small entities will be impacted to a lesser extent than larger entities, or excepted from regulation altogether. PHMSA considered the impacts on small entities in its development of four regulatory alternatives (excluding the do nothing alternative), but we believe further accommodations would be inconsistent with the safety goal of the proposed regulation to prevent incidents involving unprotected wetlines containing flammable liquid which pose a safety hazard regardless of the size of the entity that owns or operates the CTMV.

However, we believe the proposed 10-year compliance period for existing CTMVs affords small entities some flexibility in compliance by allotting a significant amount of time to small entities to retrofit their CTMVs or to acquire CTMVs that are in compliance to replace their existing fleet not in compliance. Additionally, we believe the exception from the requirements of this proposed regulatory action for wetlines on CTMVs containing no more than one liter of flammable liquid is a performance standard that also provides small entities with some flexibility in achieving compliance. Nonetheless, PHMSA has not identified any significant alternatives (i.e., technologies) that meet the statutory objectives and which minimizes any significant impact on small entities. We invite small entities to comment on alternatives that would meet the objective of this proposed regulatory action and minimize any significant impact on small entities.

The detailed small business analysis is available for review in the docket as part of the regulatory evaluation for this rulemaking. We invite comment addressing the impact that the proposals in this NPRM may have on small entities. This proposed rule has been developed in accordance with Executive Order 13272 (“Proper Consideration of Small Entities in Agency Rulemaking”) and DOT’s procedures and policies to promote compliance with the Regulatory Flexibility Act to ensure that potential impacts of draft rules on small entities are properly considered. DOT has notified the Small Business Administration’s Chief Counsel for Advocacy (SBA) of this notice of proposed rulemaking.

F. Paperwork Reduction Act

This NPRM imposes no new information collection requirements.

G. Regulation Identifier Number (RIN)

A regulation identifier number (RIN) is assigned to each regulatory action listed in the Unified Agenda of Federal
§ 173.33 Hazardous materials in cargo tank motor vehicles.

(e) Retention of hazardous materials in product piping during transportation.

(1) Liquid hazard material other than Class 3 (flammable liquid). No person may offer for transportation or transport a liquid hazardous material in Division 5.1 (oxidizer), Division 5.2 (organic peroxide), Division 6.1 (toxic), or Class 8 (corrosive to skin only) in the external product piping of a DOT specification cargo tank motor vehicle unless the vehicle is equipped with bottom damage protection devices conforming to the requirements of § 178.337–10 or § 178.345–8(b) of this subchapter, as appropriate, or the accident damage protection requirements of the specification under which the cargo tank motor vehicle was manufactured. This requirement does not apply to a cargo tank motor vehicle with external product piping designed, drained or purged so that the amount of material remaining in each pipe does not exceed one liter (0.26 gallon).

(2) Class 3 (flammable liquid) material. No person may offer or transport Class 3 material in the external product piping of a cargo tank motor vehicle marked and certified to a DOT specification on or after DATE TWO YEARS AFTER EFFECTIVE DATE OF FINAL RULE unless the cargo tank motor vehicle is protected with the bottom damage protection devices conforming to the requirements of § 178.337–10 or § 178.345–8(b) of this subchapter, as appropriate. A cargo tank motor vehicle marked and certified to a DOT specification before DATE TWO YEARS AFTER EFFECTIVE DATE OF FINAL RULE must be in compliance with requirements of this section by DATE TWELVE YEARS AFTER EFFECTIVE DATE OF FINAL RULE. The requirements in this paragraph (e)(2) do not apply to—

(i) A cargo tank motor vehicle designed and constructed with engine, body, and cargo tank permanently mounted on the same chassis with external product piping protected from impact by another motor vehicle by the structural components of the cargo tank motor vehicle, such as damage protection guards, framing members, or wheel assemblies;

(ii) A cargo tank motor vehicle containing combustible liquid as defined in accordance with § 173.120 of this part or a Class 3 flammable liquid reclassified as a combustible liquid in accordance with § 173.120; or

(iii) A cargo tank motor vehicle with external product piping designed, drained or purged so that the amount of material remaining in each pipe does not exceed one liter (0.26 gallon).

(3) A sacrificial device equipped in accordance with § 178.345–8(b)(2) of this subchapter, may not be used to satisfy the accident damage protection requirements of this paragraph (e) if hazardous material is retained in product piping in excess of excepted amounts during transportation.